

CLAIMS

1. A polycrystalline silicon substrate for a solar cell formed by growing a high purity polycrystalline silicon layer on a surface of a base
5 obtained by slicing a polycrystalline silicon ingot obtained by melting metallurgical grade silicon and performing one-direction solidification,

wherein one-direction solidification is performed on a melt prepared by adding B to molten
10 metallurgical grade silicon at an amount of 2×10^{18} cm^{-3} to $5 \times 10^{19} \text{ cm}^{-3}$ based on a concentration in the melt to produce the polycrystalline silicon ingot.

2. A polycrystalline silicon substrate for a solar cell formed by growing a high purity
15 polycrystalline silicon layer on a surface of a base obtained by slicing a polycrystalline silicon ingot obtained by melting metallurgical grade silicon and performing one-direction solidification,

20 wherein one-direction solidification is performed on a melt prepared by adding Al to molten metallurgical grade silicon at an amount of 1×10^{19} cm^{-3} to $1 \times 10^{21} \text{ cm}^{-3}$ based on a concentration in the melt to produce the polycrystalline silicon ingot.